In the claims:

1. (Currently amended) An apparatus for encoding data in accordance with a fire code $G(x) = P(x)(1+x^c)$, where $P(x)$ is an irreducible polynomial of the degree m, characterized in that the value for C can be freely set within predetermined limits and changed so that a code with variable redundancy can be obtained, the apparatus is formed so that it can implement a plurality of different fire codes, the different fire codes are selected for coding of input data in dependence on a control value, to produce the code with variable redundancy, and the variable redundancy produced by the ~~wire~~fire code is used to dynamically adapt a data rate of a source data to an available band width of a respective data channel.

2. (Previously presented) The apparatus according to claim 1, characterized in that the upper limit for C is predetermined by a maximal value and that the encoding apparatus has storage elements and modulo 2 adders whose number corresponds to a maximal number, and that switches are provided, by means of which the storage places and modulo 2 adders can connected together into an encoder according to the selected value C.

3. (Original) A decoder for decoding data in accordance with a fire code G (x) = P (x) (1 + x^c), where P (x) is an irreducible polynomial of the degree m, characterized in that the value for C can be freely set within predetermined limits.

4. (Previously presented) The decoder according to claim 3, characterized in that a disk register is provided, wherein the length of the disk register can be set as a function of the value for C.

5. (Previously presented) The decoder according to claim 4, characterized in that a second disk register is provided, whose length can be set to a value B, where in all cases, B is less than m and where B indicates the maximal number of correctable bit errors.

6. (Currently amended) A method for encoding data in accordance with a fire code G (x) = P (x) (1+x^c), where P (x) is an irreducible polynomial of the degree m, characterized in that the value for C can be freely set within predetermined limits and changed so that a code with variable redundancy can be obtained, and the variable redundancy produced by the ~~wire~~fire code is used to dynamically adapt a data rate of a source data to an available band width of a respective data channel so that

with only fixed values for a data rate for the transmission channel and variable data rate of a source, transmission reliability can be increased by selecting coding and corresponding polynomials in dependence on different situation.

7. (Currently amended) A method for decoding data in accordance with a fire code G (x) = P (x) (1 +x^c), where P (x) is an irreducible polynomial of the degree m, characterized in that the value for C can be freely set within predetermined limits and changed so that a code with variable redundancy can be obtained, ;-and the variable redundancy produced by the ~~wire~~fire code is used to dynamically adapt a data rate of a source data to an available band width of a respective data channel so that with only fixed values for a data rate for the transmission channel and variable data rate of a source, transmission reliability can be increased by selecting codings and corresponding polynomials independence on different situation.

8. (Previously presented) The method according to claim 7, characterized in that the values b and d for the error correction and detection properties of the incorporated redundancy can be freely set within predetermined limits and in accordance with d=c+1-b.

Claim 9 cancelled.

10. (Previously presented) An apparatus as defined in claim 1, wherein values b and d for the error correction and detection properties of the incorporated redundancy are adapted to the respective quality of the transmission value, and the values b and d are adapted to a bit error rate of the transmission channel.

11. (Previously presented) A method as defined in claim 6, wherein values b and d for the error correction and detection properties of the incorporated redundancy are adapted to the respective quality of the transmission value, and the values b and d are adapted to a bit error rate of the transmission channel.

12. (Previously presented) A method as defined in claim 7, wherein values b and d for the error correction and detection properties of the incorporated redundancy are adapted to the respective quality of the transmission value, and the values b and d are adapted to a bit error rate of the transmission channel.